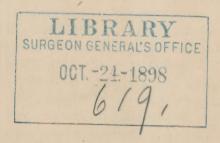
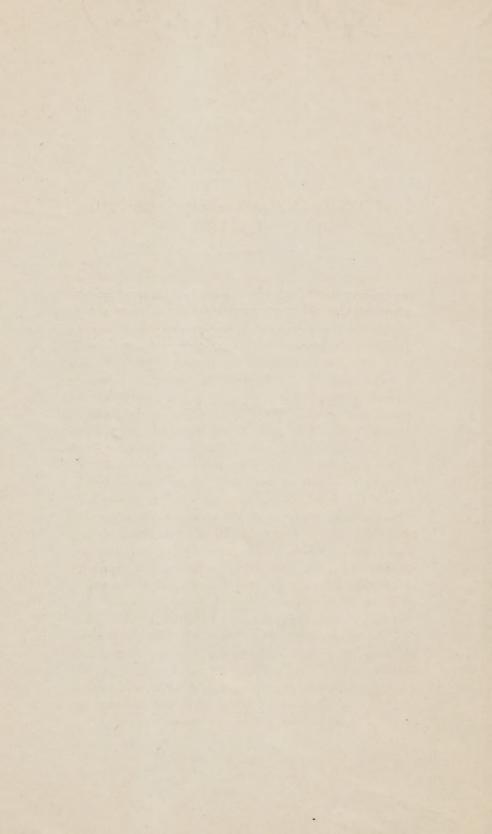


## CHRONIC INFLAMMATION OF THE SEMINAL VESICLES.

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## CHRONIC INFLAMMATION OF THE SEMINAL VESICLES.

I FEAR the title of this paper may suggest the idea of rare and obscure disease in an inaccessible situation, of interest only to specialists; but I hope to be able to show that we have within reach a means of interpreting many puzzling symptoms in a large and important class of cases.

The apparent indifference on the part of the profession at large, and even of specialists, toward the vesiculæ seminales is suprising, and it is only within a few years that they have begun to attract in some degree the attention they deserve. Mr. Jordan Lloyd of Birmingham, England, in 1889, was the first to give them full recognition, and to demonstrate their importance when diseased. In Gouley's "Diseases of the Urinary Apparatus" a chapter is mainly devoted to the subject, which is particularly valuable for its exposition of the anatomy, physiology and pathology. About a year ago Dr. Eugene Fuller of New York read an article which gives a more complete and detailed description than any other that has yet appeared of vesicular inflammation, and especially of its treatment, which he has developed and put on a practical basis.

It may be well to recall a few anatomical points: "The vesiculæ seminales are two irregularly convoluted tubes lying one on each side of the under surface of the male bladder. . . . They vary greatly in size, . . . but average perhaps two inches in length as they lie on the bladder. If dissected off and straightened out they are found to be two or three times this length. . . . The

vasa deferentia pass . . . along the inner sides of the two vesiculæ, and unite at an acute angle with the ducts of the seminal vesicles to form the common (ejaculatory) ducts. Just before this union takes place each vas deferens widens out into a tortuous sac or 'ampulla,' which closely resembles in structure the seminal vesicle itself." (Thorndike.)

Inflammation of the seminal vesicles, variously called spermatocystitis, gonecystitis (Gouley), and seminal vesiculitis, is analogous to salpingitis, that is to say the vesicles, according to Lloyd, are the analogues of the Fallopian tubes. It is rarely, if ever, a primary affection. It is almost always secondary to urethritis, generally gonorrheal, or may be, though rarely, secondary to tuberculosis or malignant growth in the vesicle. It is commonly, but not necessarily, present in cases where there is or has been epididymitis.

Acute inflammation is almost always of gonorrheal origin; it is similar to epididymitis in a general way, and rarely suppurates. The symptoms are substantially those of acute prostatitis: local pain and heat, spasmodic contraction of the perinæal muscles, etc.; and this has probably led to mistaken diagnosis in many cases.

But it is the more common and more important chronic inflammation that we have now chiefly to consider. It may result from the acute form just mentioned, but is usually chronic, or at most sub-acute, from the beginning. In this case the source of the trouble may be gonorrheal prostatitis or cystitis, or a posterior urethral catarrh resulting from congestion of the prostatic portion, brought about by prolonged and repeated sexual excitement.

In chronic vesiculitis we have a train of symptoms commonly enough observed and not always peculiar to this affection, and therefore generally attributed to other causes, There may be a chronic urethral discharge with shreds in the urine; or vesical irritability with frequent micturition,

not always present and often slight, but sometimes more marked, with urine more or less turbid and containing shreds and clumps of pus and blood. In a large majority of cases there is some disturbance of the sexual function, showing itself by the presence of one or more of the following symptoms: deficient erectile power, with or without diminished desire, spermatorrhœa, frequent emissions, occasionally hæmospermatism, viscid discharge from the meatus at stool, and the various local subjective sensations as well as the general nervous and mental symptoms peculiar to sexual neurasthenia. A burning feeling in the perinæum and along the urethra is one of the more common of the subjective sensations. Spermatic colic, a pain in the region of the vesicle due to occlusion of the duct, and sometimes accompanying ejaculation during coitus or an emission, is an occasional symptom.

It might seem that with symptoms so varied and not wholly characteristic the diagnosis would not be easy, and in fact it can only be made by rectal examination. When a sufficient number of examinations have been made to thoroughly familiarize one's self with the topography of the region under varying conditions, the diagnosis is not difficult in a well marked case. The vesicles, or at least their lower parts, are usually within easy reach of the forefinger, though in some cases they are more difficult to get at. The patient, with a moderately full bladder, should stand with the body bent to a right angle at the hips, with the knees straight, the feet spread apart and the hands resting on a chair. The forefinger is passed slowly and gently through the anus and over the prostate, which should be examined, and its condition noted as to size, form and consistency. According to my experience it is rather small in a large proportion of these cases. Just beyond the lateral lobes of the prostate, lying in the sulcus between it and the distended bladder, and extending obliquely outward and

backward toward either side, are the seminal vesicles. The examination is aided by exerting counter pressure with the free hand over the inguinal region of the side which is being explored. It is further aided, in cases where the vesicles are difficult of access, by placing the foot corresponding to the examining hand on a chair and bracing the elbow against the knee; in this way considerable force can be exerted by which to overcome the resistance of the perinæal muscles. When normal, the vesicles are soft and scarcely appreciable to the touch, sometimes not at all. But when diseased they are plainly felt. One or both may be affected. Sometimes they are nodular and indurated, resembling somewhat a twisted and knotted cord. Again they are much distended and form smooth, rounded bodies. which on palpation are felt to contain fluid. In the latter case the vesicle is often so closely attached to the prostate as to be easily mistaken for it; that is, it seems to form the posterior border of the lobe on that side; but with care fluctuation can be detected and a line of demarcation between it and the prostate can be made out, similar to the line of demarcation between the testicle and epididymis in acute inflammation of the latter organ. Sometimes the vesicles are much enlarged and dilated, but not distended, and form soft fluctuating sacs. Gouley speaks of shrivelling of the vesicles, generally associated with prostatic enlargement; but a diagnosis of this condition could hardly be made during life.

In acute inflammation, of course, the swelling is greater, the perivesicular tissue being involved; it is diffused, doughy and hot, and is extremely sensitive to the touch. The sensation in the chronic affection varies in different cases. Sometimes there is decided pain and tenderness on pressure, but it is usually not marked unless the finger bears down quite hard; it is more commonly described as a disagreeable sensation and occasionally causes faintness.

Sometimes there is only slight sensitiveness even on firm pressure. By means of this pressure the contents of the vesicle are emptied into the deep urethra, and if in considerable quantity will ooze from the meatus, and will in any case appear in the urine passed after the operation. The fluid thus squeezed out varies in different cases from a thin liquid resembling skimmed milk to a thick gelatinous substance sometimes containing inspissated particles, and appearing in the urine in the form of clumps and shreds. Microscopic examination of the thin fluid shows only a little epithelium and a few dead spermatozoa; the thick substance often seems to consist of masses and bands of fibrinous material, entangled in which are sometimes a few, sometimes great numbers of motionless spermatozoa. When normal vesicles are squeezed nothing will appear, except, perhaps, a very slight turbidity of the urine.

With respect to prognosis, it must necessarily, a few years ago, have been regarded as decidedly unfavorable. But owing to recent progress in treatment, although more extensive data than are now attainable will be required before a reliable opinion can be formed as to chances of complete recovery, it is already safe to say that improvement may be expected in a majority of cases.

The treatment is simple, but requires a good deal of judgment, chiefly to avoid overdoing. It consists in pressure with the end of the forefinger, reaching as far up toward the free end of the vesicle as possible, and then stripping it down toward the duct. In this way the abnormal secretions are removed, and are not allowed to accumulate. Sometimes the ducts are obstructed by inspissated material or by concretions called sympexia, and several treatments are necessary to clear them; or a sound may be passed into the bladder and the vesicles pressed against it, as advised by Gouley, the obstruction being in this way more easily dislodged. The danger in overdoing the treatment is of

bringing on an acute exacerbation by too active manipulation, which I was unfortunate enough to do in one of my first cases. As some patients are much more susceptible to reaction than others, great caution should be observed at first, only gentle pressure being used and the effect carefully watched. As to frequency of the sittings, Gouley recommends daily treatment, but Fuller thinks it should not be repeated oftener than once in four days. The effect of the treatment is not, as a rule, immediately apparent, although in some cases marked improvement is soon noticeable. It is generally necessary to keep it up several weeks, sometimes even months, before the vesicles are restored to a normal condition. This is brought about by keeping them empty until their muscular walls recover their tone and they are able to properly carry on their functions. This process is appreciable to the physician in a gradual decrease of the swelling and softening of the induration, until after a while the vesicles apparently disappear; that is, they become as difficult to feel as in the normal state. At the same time the sensitiveness steadily diminishes and the amount of fluid expressed grows constantly less until there is no more. I have noticed also, in a few cases, that the prostate, which is necessarily massaged more or less during manipulation of the vesicles, has undergone a considerable change, increasing in size when atrophied, and assuming a more nearly normal consistency. In the course of the treatment a gradual improvement in the general health and in the nervous condition, or a diminution in the frequency of emissions, or, in general, an abatement of whatever symptoms secondary to the disorder have been prominent in each particular case, may be looked for. No medicinal treatment is required unless indicated by special symptoms.

Since the latter part of January, when, through Dr. Fuller, whose methods I have closely followed, I became

especially interested in this subject, I have examined seventy-four cases with reference to the condition of the seminal vesicles; all being cases in whom there was reason to suspect that disease of these organs might exist. fifty-five, a more or less abnormal condition was found. both vesicles being affected in thirty-eight of them. In two cases the trouble was acute, in three sub-acute, and in the remainder it was chronic. In the acute cases, in two of the sub-acute, and in thirty-one of the chronic cases, there was a history of gonorrhea. Of twenty-three cases, all chronic, in whom I have been able to follow up treatment sufficiently long to get definite indications of its effect, there has been improvement in nearly all. In a few it has been marked and speedy, some having practically recovered; in the majority it is still too soon to give final results, while a very few have been disappointing.

Since this paper was written I have had the pleasure and advantage of hearing a very exhaustive article on the subject by Dr. R. W. Taylor of New York, who at the same time showed by means of an anatomical specimen that the vesicle is so convoluted and doubled on itself in such a way that stripping the organ with the finger toward the duct would empty only a portion of it, together perhaps with the vas deferens. He believes that the dilated portion or ampulla of the vas deferens is often mistaken for the vesicle. He is, in fact, somewhat sceptical as to the efficacy of the treatment by pressure. However this may be, it is certain that the large amount of fluid squeezed out and the progressive diminution in the swelling observed in many cases show that the pressure has been effectual. In view of these facts, which seem to be not wholly consistent, a few considerations suggest themselves:-

1. The fluid in a distended vesicle, subjected to pressure, would escape at the point of least resistance, which would be the natural outlet, no matter how tortuous, unless

the wall of the vesicle were ruptured by violence. Simple pressure on such a blind sac would seem better than an attempt to strip the vesicle down toward the duct.

- 2. The slow and unsatisfactory progress of a few cases may be due to the difficulty of emptying such portions of the vesicle, which may in these cases be the chief seat of disease.
- 3. In some cases the ampulla of the vas deferens may alone be affected, when the stripping process would be easy and effectual.
- 4. Disease of the vas deferens may possibly be of more importance than that of the vesicle itself, obstructing, as it does, the direct road from the testicle.
- 5. Simple massage of the vesicles may play an important part in the treatment.

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